



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

MAY 11 2006

Ms. Mimi Drew, Director
Division of Water Resource Management
Florida Department of Environmental Protection
Twin Towers Office Building
Mail Station 3500
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Dear Ms. Drew:

The Environmental Protection Agency (EPA) has completed its review, as documented in the enclosed memorandum, for revisions made to Chapter 62-302.800 of the Florida Administrative Code (F.A.C.), titled Site Specific Alternative Criteria (SSAC). The Florida Department of Environmental Protection (FDEP) filed the revised language for adoption on December 20, 2005, and it became effective under State law on January 9, 2006. FDEP submitted the revised SSAC language to EPA for Clean Water Act (CWA) § 303(c) review and approval by letter dated March 16, 2006. The CWA §303(c) package submitted to EPA for review was determined to be complete by meeting the minimum requirements for water quality standards submissions provided in 40 CFR § 131.6.

The revised SSAC language contained in Rule 62-302.800(2), F.A.C., is applied as a moderating provision to Florida's water quality standards when different criterion values that protect existing and designated uses for a particular waterbody are demonstrated to be more appropriate for that waterbody based upon scientifically defensible methods. The January 9, 2006, revision expands the scientific methodologies that may be used to assess aquatic toxicity for the purposes of establishing a SSAC and also reduces the list of water quality parameters excluded from the SSAC process, contained in Rule 62-302.800(2), F.A.C. The revised SSAC language is consistent with the requirement that states establish numeric criteria based on 304(a) guidance or other scientifically defensible methods. See 40 C.F.R. § 131.12(b)(1).

Please be aware that a SSAC is only appropriate where the proposed alternative criterion maintains existing and designated beneficial uses for the affected waterbody. For waterbodies that do not meet a water quality criterion because of "man-induced conditions which cannot be controlled or abated," it would not be appropriate under the CWA to establish a Type I SSAC pursuant to Rule 62-302.800(1), F.A.C., unless a demonstration is made that the proposed SSAC protects the designated use. There are options, other than SSAC's, available to States to account for other ambient conditions (e.g., concentrations due to non-natural, man-made conditions) which exceed national

criteria. If the current designated use and its supporting criteria are not attainable, a state may conduct a Use Attainability Analysis (UAA) consistent with 40 CFR § 131.10 and revise the designated use or the supporting criteria based on the results of the UAA. In addition, a state may adopt a CWA Variance (temporary downgrade in use) consistent with 40 CFR § 131.10 and § 131.13. In either case, the existing uses of the waterbody segment must be maintained and protected. See "Establishing Site Specific Aquatic Life Criteria Equal to Natural Background," memorandum from Tudor T. Davies, Director of Office of Science and Technology, to Regional Water Management Division Directors, and State and Tribal Water Quality Management Program Directors (November 5, 1997).

Based on EPA's review and analysis of the supporting documentation provided by FDEP for the revised SSAC language contained in Chapter 62-302.800, F.A.C., it is EPA's conclusion that the requirements of the Clean Water Act and provisions of 40 CFR § 131 have been met. Therefore, based on the authorities of CWA § 303(c), EPA is approving the revisions made to Chapter 62-302.800, F.A.C., that are part of Florida's water quality standards.

If you have questions concerning this action, please do not hesitate to call me at (404) 562-9345, or Cecelia Harper, Florida Standards Coordinator, at (404) 562-9418.

Sincerely,



James D. Giattina, Director
Water Management Division

Enclosure

cc: Jerry Brooks, FDEP
Greg Knecht, FDEP
Eric Shaw, FDEP
Stacey Cowley, FDEP
Jon Hemming, FWS
Miles Croom, NMFS



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APR 18 2006

TO: Andrew Bartlett, Chief
Standards, Monitoring, and TMDL Section

THRU: Annie Godfrey, Chief *4/20/06*
East Standards, Monitoring, and TMDL Section

FROM: *Cecelia Ann Harper*
Cecelia Ann Harper, Environmental Scientist
East Standards, Monitoring, and TMDL Section

SUBJECT: Review of Revisions to Florida Administrative Code Chapter 62-302.800

Review of Florida Administrative Code (F.A.C.) Chapter 62-302.800 titled Site Specific Alternative Criteria (SSAC) is complete. The Florida Department of Environmental Protection (FDEP) filed the revised language for adoption on December 20, 2005 and it became effective under State law on January 9, 2006. FDEP submitted the revised SSAC language to EPA for Clean Water Act (CWA) § 303(c) review and approval by letter dated March 16, 2006. The 303(c) package submitted to EPA for review was determined to be complete by meeting the minimum requirements for water quality standards submissions provided for in 40 CFR §131.6.

Background:

Site specific criteria (SSC) are allowed by federal regulation and are subject to EPA review and approval. Federal water quality standards regulations provided for in 40 CFR § 131.11(b) require that numeric criteria be established based on 304(a) Guidance, or 304(a) Guidance modified to reflect site-specific conditions, or other scientifically defensible methods. As required by 40 CFR § 131.5(a)(2), EPA must review new and revised State water quality standards to determine whether the adopted criteria protects designated uses and is based on sound scientific rationales. The intention of a SSC is to refine the EPA CWA § 304(a) criteria guidance to provide the intended level of protection to aquatic life for a waterbody, usually taking into account the biological and/or chemical conditions at a defined site. The derivation of a SSC does not change the intended level of protection for the site's aquatic life.

Revisions to Florida's Currently Approved SSAC Language:

62-302.800 Site Specific Alternative Criteria.

(1) Type I Site Specific Alternative Criteria: A water body, or portion thereof, may not meet a particular ambient water quality criterion specified for its classification, due to

natural background conditions or man-induced conditions which cannot be controlled or abated. In such circumstances, and upon petition by an affected person or upon the initiation by the Department, the Secretary may establish a site specific alternative water quality criterion when an affirmative demonstration is made that an alternative criterion is more appropriate for a specified portion of waters of the state. Public notice and an opportunity for public hearing shall be provided prior to issuing any order establishing alternative criteria.

(1)(a) through (b) No change.

(2) Type II Site Specific Alternative Criteria: In accordance with the procedures set forth below, affected persons may petition the Department to adopt an alternative water quality criterion for a specific water body, or portion thereof, on the basis of site-specific reasons other than those set forth above in subsection 62-302.800(1), F.A.C. The Department shall process any such petition as follows:

(2)(a) through (b) No change.

(c) The Department shall initiate rulemaking for the Commission to consider approval of the proposed alternative criterion as a rule if the petitioner meets all the requirements of this subparagraph and its subparts. The petitioner must demonstrate that the proposed criterion would fully maintain and protect human health, existing uses, and the level of water quality necessary to protect human health and existing and designated beneficial uses. If the petition fails to meet any of these requirements (including the required demonstration), the Department shall issue an order denying the petition. In deciding whether to initiate rulemaking or deny the petition, the Department shall evaluate the petition and other relevant information according to the following criteria and procedures:

(2)(c) 1. No change.

2. In making the demonstration required by this subparagraph (c), the petition shall include an assessment of aquatic toxicity, except on a showing that no such assessment is relevant to the particular criterion. The assessment of aquatic toxicity shall show that physical and chemical conditions at the site alter the toxicity or bioavailability of the compound in question and shall meet the requirements and follow the Indicator Species procedure set forth in Water Quality Standards Handbook (December 1983), a publication of the United States Environmental Protection Agency, incorporated here by reference. If, however, the Indicator Species Procedure is not applicable to the proposed site-specific alternative criterion, the petitioner may propose another generally accepted scientific method or procedure to demonstrate with equal assurance that the alternative criterion will protect the aquatic life designated use of the water body.

(2)(c) 3. through 7. No change.

(d) The provisions of this subsection do not apply to criteria contained in Rule 62-302.500, F.A.C., or criteria that apply to:

- ~~1. Bacteriological Quality~~
- ~~1. 2. Biological Integrity.~~
- ~~2. 3. B.O.D.~~
- ~~4. Chlorides~~
- ~~5. Color~~
- ~~6. Detergents~~
- ~~7. Dissolved Oxygen~~
- ~~8. Dissolved Solids~~
- ~~3. 9. Nutrients~~
- ~~4. 10. Odor.~~
- ~~5. 11. Oils and Greases.~~
- ~~6. 12. Radioactive Substances.~~
- ~~13. Specific conductance~~
- ~~7. 14. Substances in concentrations that injure, are chronically toxic to, or produce adverse physiological or behavioral response in humans, animals, or plants.~~
- ~~8. 15. Substances in concentrations that result in the dominance of nuisance species.~~
- ~~9. 16. Total Dissolved Gases.~~
- ~~17. Transparency~~
- ~~18. Turbidity~~
- ~~10. 19. Any criterion or maximum concentration based on or set forth in paragraph 62-4.244(3)(b), F.A.C.~~

(e) Despite any failure of the Department to meet a deadline set forth in this subsection ~~(2)(4)~~, the grant of an alternative criterion shall not become effective unless approved as a rule by the Commission.

(2)(f) No change.

(3) through (4) No change.

Florida's Revised SSAC Language :

F.A.C. Chapter 62-302.800:

- (1) Type I Site Specific Alternative Criteria: A water body, or portion thereof, may not meet a particular ambient water quality criterion specified for its classification, due to natural background conditions or man-induced conditions which cannot be controlled or abated. In such circumstances, and upon petition by an affected person or upon the initiation by the Department, the Secretary may establish a site specific alternative water quality criterion when an affirmative demonstration is made that an alternative criterion is more appropriate for a specified portion of waters of the state. Public

notice and an opportunity for public hearing shall be provided prior to issuing any order establishing alternative criteria.

(a) The affirmative demonstration required by this section shall mean a documented showing that the proposed alternative criteria would exist due to natural background conditions...Such demonstration shall be based upon relevant factors which include:

1. A description of the physical nature of the specified water body and the water pollution sources affecting the criterion to be altered.
2. A description of the historical and existing water quality of the parameter of concern including, spatial, seasonal, and diurnal variations, and other parameters or conditions which may affect it. Conditions in similar water bodies may be used for comparison.
3. A description of the historical and existing biology, including variations, which may be affected by the parameter of concern. Conditions in similar water bodies may be used for comparison.
4. A discussion of any impacts of the proposed alternative criteria on the designated use of the waters and adjoining waters.

(b) The Secretary shall specify, by order, the site specific criteria for the parameters which the Secretary determines to have been demonstrated by the preponderance of competent substantial evidence to be more appropriate.

(2) Type II Site Specific Alternative Criteria: In accordance with the procedures set forth below, affected persons may petition the Department to adopt an alternative water quality criterion for a specific water body, or portion thereof, on the basis of site-specific reasons other than those set forth above in subsection 62-302.800(1), F.A.C. The Department shall process any such petition as follows:

- (a) No later than 60 days after receipt of a petition, the Department shall review the petition and notify the petitioner of whether the petition is sufficiently complete to enable the Department to evaluate the proposed site-specific alternative criterion under subparagraph (c) below. If the petition is not sufficiently complete, the Department shall request the submittal of additional information. The Department shall review any additional information within 60 days of receipt from the applicant and may then request only that information reasonably needed to clarify or answer new questions directly related to the additional information, unless the Department shows good cause for not having requested the information previously.
- (b) Petitions deemed complete by the Department shall be processed under subparagraph (c). For any petition not deemed complete, if the petitioner believes

that additional information requested by the Department under subparagraph (a) is not necessary to the Department's evaluation, the Department, at the petitioner's request, shall proceed to process the petition under subparagraph (c) below.

- (c) The Department shall initiate rulemaking for the Commission to consider approval of the proposed alternative criterion as a rule if the petitioner meets all the requirements of this subparagraph and its subparts. The petitioner must demonstrate that the proposed criterion would fully maintain and protect human health, existing uses, and the level of water quality necessary to protect human health and existing and designated beneficial uses. If the petition fails to meet any of these requirements (including the required demonstration), the Department shall issue an order denying the petition. In deciding whether to initiate rulemaking or deny the petition, the Department shall evaluate the petition and other relevant information according to the following criteria and procedures:
1. The petition shall include all the information required under subparagraphs (1)(a)1.-4. above.
 2. In making the demonstration required by this subparagraph (c), the petition shall include an assessment of aquatic toxicity, except on a showing that no such assessment is relevant to the particular criterion. The assessment of aquatic toxicity shall show that physical and chemical conditions at the site alter the toxicity or bioavailability of the compound in question and shall meet the requirements and follow the Indicator Species procedure set forth in Water Quality Standards Handbook (December 1983), a publication of the United States Environmental Protection Agency, incorporated here by reference. If, however, the Indicator Species Procedure is not applicable to the proposed site-specific alternative criterion, the petitioner may propose another generally accepted scientific method or procedure to demonstrate with equal assurance that the alternative criterion will protect the aquatic life designated use of the water body.
 3. The demonstration shall also include a risk assessment that determines the human exposure and health risk associated with the proposed alternative criterion, except on a showing that no such assessment is relevant to the particular criterion. The risk assessment shall include all factors and follow all procedures required by generally accepted scientific principles for such an assessment, such as analysis of existing water and sediment quality, potential transformation pathways, the chemical form of the compound in question, indigenous species, bioaccumulation and bioconcentration rates, and existing and potential rates of human consumption of fish, shellfish, and water. If the results of the assessments of health risks and aquatic toxicity differ, the more stringent result shall govern.

4. The demonstration shall include information indicating that one or more assumptions used in the risk assessment on which the existing criterion is based are inappropriate at the site in question and that the proposed assumptions are more appropriate or that physical or chemical characteristics of the site alter the toxicity or bioavailability of the compound. Such a variance of assumptions, however, shall not be a ground for a proposed alternative criterion unless the assumptions characterize a factor specific to the site, such as bioaccumulation rates, rather than a generic factor, such as the cancer potency and reference dose of the compound. Man-induced pollution that can be controlled or abated shall not be deemed a ground for a proposed alternative criterion.
 5. The petition shall include all information required for the Department to complete its economic impact statement for the proposed criterion.
 6. For any alternative criterion more stringent than the existing criterion, the petition shall include an analysis of the attainability of the alternative criterion.
 7. No later than 180 days after receipt of a complete petition or after a petitioner requests processing of a petition not found to be complete, the Department shall notify the petitioner of its decision on the petition. The Department shall publish in the Florida Administrative Weekly either a notice of rulemaking for the proposed alternative criterion or a notice of the denial of the petition, as appropriate, within 30 days after notifying the petitioner of the decision. A denial of the petition shall become final within 14 days unless timely challenged under Section 120.57, F.S.
- (d) The provisions of this subsection do not apply to criteria contained in Rule 62-302.500, F.A.C., or criteria that apply to:
1. Biological Integrity.
 2. B.O.D.
 3. Nutrients
 4. Odor.
 5. Oils and Greases.
 6. Radioactive Substances.
 7. Substances in concentrations that injure, are chronically toxic to, or produce adverse physiological or behavioral response in humans, animals, or plants.
 8. Substances in concentrations that result in the dominance of nuisance species.
 9. Total Dissolved Gases.
 10. Any criterion or maximum concentration based on or set forth in paragraph 62-4.244(3)(b), F.A.C.

- (e) Despite any failure of the Department to meet a deadline set forth in this subsection (2) the grant of an alternative criterion shall not become effective unless approved as a rule by the Commission.
- (f) Nothing in this rule shall alter the rights afforded to affected persons by Chapter 120, F.S.
- (3) The Department shall modify permits of existing sources affected in a manner consistent with the Secretary's Order.
- (4) Additional relief from criteria established by this Chapter may be provided through exemption pursuant to Rule 62-4.243, F.A.C., or variances as provided for by Rule 62-103.100, F.A.C.

Summary of Revisions and CWA 303(c) Analysis of F.A.C. Chapter 62-302.800:

Florida has revised F.A.C. Chapter 62-302.800 by this CWA § 303(c) action as follows:

1. (1) The following language is added: "Type I Site Specific Alternative Criteria".

Analysis:

SSAC's established based on natural background conditions or man-induced conditions which cannot be controlled or abated are defined by new language as "Type I Site Specific Alternative Criteria". This is a clarifying statement and is a non-substantive revision under CWA § 303(c).

A site specific alternative criterion is only appropriate where the proposed alternative criterion maintains existing and designated beneficial uses for the affected waterbody. For waterbodies that do not meet a water quality criterion because of "man-induced conditions which cannot be controlled or abated,"¹ it would not be appropriate under the CWA to establish a Type I SSAC pursuant to F.A.C. Chapter 62-302.800(1), unless designated uses are protected. There are other options available to States to account for other ambient conditions (e.g., concentrations due to non-natural, man-made conditions) which exceed national criteria. If the current designated use and its supporting criteria are not attainable, a State may conduct a Use Attainability Analysis (UAA) consistent with 40 CFR § 131.10 and revise the designated use or the supporting criteria based on the

¹ "[M]an-induced conditions which cannot be controlled or abated," is defined in F.A.C. 62-302.200(14) as:

conditions that have been influenced by human activities, and (a) Would remain after removal of all point sources, (b) Would remain after imposition of best management practices for non-point sources, and (c) Cannot be restored or abated by physical alteration of the water body, or there is no reasonable relationship between the economic, social and environmental costs and the benefits of restoration or physical alteration.

results of the UAA. In addition, a State may adopt a CWA Variance (temporary use downgrade) consistent with regulation 40 CFR § 131.10 and .13. In either case, the existing uses of the waterbody segment must be maintained and protected. See "Establishing Site Specific Aquatic Life Criteria Equal to Natural Background," memorandum from Tudor T. Davies, Director of Office of Science and Technology, to Regional Water Management Division Directors and State and Tribal Water Quality Management Program Directors (November 5, 1997)

2. (2) The following language is added: "Type II Site Specific Alternative Criteria".

Analysis:

SSAC's established based on reasons other than natural background conditions or man-induced conditions which cannot be controlled or abated are defined by new language as "Type II Site Specific Alternative Criteria". This is a clarifying statement and is a non-substantive revision under CWA § 303(c).

3. (2)(c)2. The following language is added: "If, however, the Indicator Species Procedure is not applicable to the proposed site-specific alternative criterion, the petitioner may propose another generally accepted scientific method or procedure to demonstrate with equal assurance that the alternative criterion will protect the aquatic life designated use of the water body".

Analysis:

This language expands the scientific methodology or procedures that can be used to demonstrate that a SSAC is appropriate and protects the existing and designated uses for any particular water body.

Site Specific Criteria are allowed by federal regulation and are subject to EPA review and approval. Federal water quality standards regulations require that numeric criteria be established based on "304(a) Guidance; or 304(a) Guidance modified to reflect site-specific conditions; or other scientifically defensible methods." See 40 CFR § 131.11(b). As required by 40 CFR § 131.5(a)(2), EPA must review State water quality standards, to determine "whether a State has adopted criteria to protect the designated uses" and whether the criteria are scientifically defensible [40 CFR § 131.100(b)].

EPA's current national guidance specifies three methodologies that States may follow to derive site specific criteria for aquatic life uses. These are the Recalculation Procedure, the Water-Effect Ratio Procedure and the Resident Species Procedure. These procedures are discussed at length in the Water Quality Standards Handbook (EPA-823-B940005a, 1994). In addition, under EPA's current guidance and practice, States may develop other procedures for deriving site specific criteria which EPA will also approve as long as the SSC are developed based on sound scientific rationales. Lastly, EPA also recognizes there may be scenarios where naturally occurring concentrations of pollutants exceed

CWA § 304(a) criteria guidance while still providing protection of existing and designated uses. See "Establishing Site Specific Aquatic Life Criteria Equal to Natural Background," memorandum from Tudor T. Davies, Director of Office of Science and Technology, to Regional Water Management Division Directors and State and Tribal Water Quality Management Program Directors (November 5, 1997)

4. (2)(d) The following criteria were removed from the Site Specific Alternative Criteria exclusion list: "Bacteriological Quality", "Chlorides", "Color", "Detergents", "Dissolved Oxygen", "Dissolved Solids", "Specific Conductance", "Transparency", and "Turbidity".

Analysis:

The removal of these parameters from the exclusion list now allows for the demonstration of a SSAC for these criteria.

There are no criteria exclusions for SSC's in the CWA, or its regulations and guidance. Therefore, the expansion of the list of water quality criteria that are suitable for a SSAC is allowable under Federal law.

5. (2)(e) Reference to the subsection is changed from (4) to (2).

Analysis:

This appears to correct a typographical error and is a non-substantive revision under CWA § 303(c).

Endangered Species Act (ESA) and Essential Fish Habitat Consultation:

With regard to consultation activities for Section 7 of the ESA, EPA Region 4 has concluded that the Agency's action to approve the revision to Florida water quality standards F.A.C. Chapter 62-302.800 will have "no effect" on listed species or their critical habitat. Although not required, EPA will communicate the Agency's "no effect" decision with the U.S. Fish and Wildlife Service and National Marine Fishery Service by providing them a copy of our CWA § 303(c) approval letter.

Conclusion:

Based on the analysis of available information, it is the Agency's conclusion that the requirements of the Clean Water Act and 40 CFR § 131 have been met and that approval of the revisions to F.A.C. Chapter 62-302.800 are appropriate.